



STEVEN L. BESHEAR  
GOVERNOR

ENERGY AND ENVIRONMENT CABINET  
DEPARTMENT FOR ENVIRONMENTAL PROTECTION  
DIVISION OF WATER  
200 FAIR OAKS LANE  
FRANKFORT, KENTUCKY 40601-1190  
[www.kentucky.gov](http://www.kentucky.gov)

LEONARD K. PETERS  
SECRETARY

**FACT SHEET**

**KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM  
PERMIT TO DISCHARGE TREATED WASTEWATER  
INTO WATERS OF THE COMMONWEALTH**

KPDES No.: KY0034011      Permit Writer: Diana Davidson      Date: 3/12/09  
AI No.: 1855

1. **SYNOPSIS OF APPLICATION**

a. Name and Address of Applicant

Pilot Travel Centers, LLC  
5508 Lonas Road  
Knoxville, Tennessee 37909

b. Facility Location

Pilot Travel Center #440  
205 Pendleton Road  
Pendleton, Henry County, Kentucky

c. Description of Applicant's Operation

Travel and Fuel Service Center

d. Design Capacity

Outfall 001: 0.0014 MGD  
Outfall 002: Truck rinsing wastewater and storm water runoff

e. Description of Existing Pollution Abatement Facilities

Outfall 001: Treatment process consists of grinding, aeration, sedimentation, and disinfection.

Outfall 002: Treatment process consists of an oil/water separator with a grit removal chamber and retention pond.

f. Permitting Action

This is a reissuance of a minor KPDES permit for a wastewater treatment plant serving a truck and automobile fueling station, convenience market, fast food restaurant, and other amenities.

2. **RECEIVING WATER**

a. Name/Mile Point

Facility discharges to an unnamed tributary to Harrods Creek at 38°27' 06" North Latitude and 85°17' 58" West Longitude.

b. Stream Segment Use Classification

Pursuant to 401 KAR 10:026, Section 5, the unnamed tributary to Harrods Creek carries the following classifications: Warmwater Aquatic Habitat, Primary/Secondary Contact Recreation, and Domestic Water Supply.

c. Stream Segment Categorization

Pursuant to 401 KAR 10:030, Section 1, the unnamed tributary to Harrods Creek is categorized as a High Quality Water.

d. Stream Low Flow Condition

The 7-day, 10-year low flow and harmonic mean conditions of the unnamed tributary to Harrods Creek are 0.00 and 0.00 cfs, respectively.

### 3. REPORTED DISCHARGE AND PROPOSED LIMITS

Serial Number 001 - Sanitary Wastewater (Design Flow = 0.0014 MGD)

Effluent Characteristics	Reported Discharge		Proposed Limits		Applicable Water Quality Criteria and/or Effluent Guidelines
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	
Flow (MGD)	0.0071	0.0071	Report	Report	401 KAR 5:065, Section 2(8)
BOD <sub>5</sub> (mg/l)	12.59	12.59	30	45	401 KAR 10:031, Section 4 401 KAR 5:045, Sections 3 and 5
TSS (mg/l)	10.60	10.60	30	45	401 KAR 10:031, Section 4 401 KAR 5:045, Sections 2 and 3
Fecal Coliform (N/100 ml)	108.08	108.08	Removing from permit		401 KAR 5:080, Section 1(2)(c)2
<i>Escherichia Coli</i> (N/100 ml)	NR	NR	130	240	401 KAR 10:031, Section 7 401 KAR 5:045, Section 4 401 KAR 5:080, Section 1(2)(c)2
Ammonia Nitrogen (as mg/l N)					
May 1 - October 31	1.63	1.63	4.0	6.0	401 KAR 10:031, Section 4
November 1 - April 30	1.56	1.56	6.0	9.0	401 KAR 5:045, Sections 3 and 5
Dissolved Oxygen (mg/l) (minimum)	7.16	N/A	Not less than 7.0		401 KAR 10:031, Section 4 401 KAR 5:045, Sections 3 and 5
pH (standard units)	6.9	7.86	6.0 (min)	9.0 (max)	401 KAR 10:031, Section 4 401 KAR 5:045, Section 4
Total Residual Chlorine (mg/l)	NR	NR	0.011	0.019	401 KAR 10:031, Section 4(k)

The data contained under the reported discharge columns is not from the renewal application, but rather from the analysis of the DMR data that has been reported during the term of the previous permit.

The abbreviation BOD<sub>5</sub> means Biochemical Oxygen Demand (5-day).

The abbreviation TSS means Total Suspended Solids.

The abbreviation NR means not reported on the Discharge Monitoring Report (DMR).

The effluent limitations for BOD<sub>5</sub> and TSS are Monthly (30 day) and Weekly (7 day) Averages.

The effluent limitations for *Escherichia Coli* are thirty (30) day and seven (7) day Geometric Means.

4. METHODOLOGY USED IN DETERMINING LIMITATIONS

a. Serial Number

Outfall 001 Sanitary Wastewater (Design Flow = 0.0014 MGD)

b. Effluent Characteristics

Outfall 001: Flow, BOD<sub>5</sub>, TSS, Fecal Coliform Bacteria, *Escherichia Coli*, pH, Ammonia Nitrogen, Dissolved Oxygen, and Total Residual Chlorine (TRC).

c. Pertinent Factors

None

d. Monitoring Requirements

Flow monitoring shall be conducted instantaneously once per quarter.

BOD<sub>5</sub>, TSS, Ammonia Nitrogen, shall be monitored once per quarter by 24 hour composite sampling.

*Escherichia Coli*, pH, Dissolved Oxygen, Total Residual Chlorine, shall be monitored once per quarter by grab sample.

e. Justification of Conditions

The Kentucky regulations cited below have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes.

**Outfall 001**

*Escherichia Coli* and Fecal Coliform Bacteria

The limits for *Escherichia Coli* are consistent with the requirements of 401 KAR 10:031, Section 7, 401 KAR 5:045 Section 4 and 401 KAR 5:080, Section 1(2)(c) 2. The removal of Fecal Coliform Bacteria is consistent with the requirements of 401 KAR 5:080k Section 1 (2) (c)2. Although Fecal Coliform Bacteria has been used as an indicator of fecal contamination, it does contain other species that are not necessarily fecal in origin. EPA recommends *Escherichia Coli*, which is specific to fecal material from warm-blooded animals, as the best indicator of health risk from contact with recreational waters. Therefore, it is the "Best Professional Judgment "BPJ" of the Division of Water that *Escherichia Coli* replace Fecal Coliform Bacteria on this permit.

Flow

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(8).

Ammonia Nitrogen, and Dissolved Oxygen

The limits for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4, and 401 KAR 5:045, Sections 3 and 5. Section 4 of 10:031 establishes water quality criteria for the protection of Kentucky's waters. Section 5 of 5:045 requires biochemically degradable wastewaters to receive treatment in excess of secondary treatment if the Cabinet determines that the receiving water would not satisfy applicable water quality standards as a result of a facility discharge or discharges from multiple facilities.

BOD<sub>5</sub> and Total Suspended Solids

The limits for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4 and 5:045, Sections 2 and 3. Section 4 of 10:031 establishes water quality criteria for the protection of Kentucky's waters. Sections 2 and 3 of 5:045 require biochemically degradable wastewaters to receive secondary treatment.

pH

The limits for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4 and 5:045, Section 4. Section 4 of 10:031 establishes water quality criteria for the protection of Kentucky's waters. Section 4 of 5:045 establishes the acceptable levels of these parameters for biochemically degradable wastewaters.

Total Residual Chlorine

The limits for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4.

## 5. REPORTED DISCHARGE AND PROPOSED LIMITS

Serial Number 002 - Truck Rinsing Wastewater and Storm Water Runoff

Effluent Characteristics	Reported Discharge		Proposed Limits		Applicable Water Quality Criteria and/or Effluent Guidelines
	Monthly Average	Daily Maximum	Monthly Average	Daily Maximum	
Flow (MGD)	0.0006	0.0091	Report	Report	401 KAR 5:065, Section 2(8)
BOD <sub>5</sub> (mg/l)	8.87	8.87	30	45	401 KAR 10:031, Section 4 401 KAR 5:045, Sections 3 and 5
TSS (mg/l)	15.38	15.38	30	45	401 KAR 10:031, Section 4 401 KAR 5:045, Sections 2 and 3
Oil & Grease (mg/l)	6.73	6.73	10	15	401 KAR 5:080, Section 1(2)(c)2
pH (standard units)	7.65	7.65	6.0 (min)	9.0 (max)	401 KAR 10:031, Section 4 401 KAR 5:045, Section 4
Lead (µg/l)	0.0165	0.0165	0.0032	Report	401 KAR 5:065, Section 2(8)
Zinc (µg/l)	0.0780	0.0780	Report	0.1198	401 KAR 5:065, Section 2(8)
Chlorides (mg/l)	77.35	77.35	Report	Report	401 KAR 5:065, Section 2(8)
Surfactants (MBAS)	0.299	0.299	Report	Report	401 KAR 5:065, Section 2(8)

The data contained under the reported discharge columns is not from the renewal application, but rather from the analysis of the DMR data that has been reported during the term of the previous permit.

The abbreviation BOD<sub>5</sub> means Biochemical Oxygen Demand (5-day).

The abbreviation TSS means Total Suspended Solids.

The abbreviation NR means not reported on the Discharge Monitoring Report (DMR).

The effluent limitations for BOD<sub>5</sub> and TSS are Monthly (30 day) and Weekly (7 day) Averages.

4. **METHODOLOGY USED IN DETERMINING LIMITATIONS**

a. Serial Number

Outfall 002 Truck Rinsing Wastewater at Fueling Areas and Storm Water Runoff

b. Effluent Characteristics

Outfall 002: Flow, BOD<sub>5</sub>, TSS, pH, Lead, Chlorides, Zinc, and Surfactants

c. Pertinent Factors

None

d. Monitoring Requirements

Flow monitoring shall be conducted instantaneously once per quarter.

BOD<sub>5</sub>, TSS, Oil & Grease, Lead, Zinc, and Surfactant shall be monitored once per quarter by grab sample.

e. Justification of Conditions

The Kentucky regulations cited below have been duly promulgated pursuant to the requirements of Chapter 224 of the Kentucky Revised Statutes.

Flow

The monitoring requirements for this parameter are consistent with the requirements of 401 KAR 5:065, Section 2(8).

BOD<sub>5</sub>, Total Suspended Solids, and Oil & Grease

The limits for these parameters are consistent with the requirements of 401 KAR 10:031, Section 4 and 5:045, Sections 2 and 3. Section 4 of 10:031 establishes water quality criteria for the protection of Kentucky's waters. Sections 2 and 3 of 5:045 require biochemically degradable wastewaters to receive secondary treatment.

Lead, Zinc and pH

The limits for these parameters are consistent with the requirements of 401 KAR 10:031, Sections 4 and 6. Section 6 of 401 KAR 10:031 establishes water quality criteria for the protection of Kentucky's waters. Section 4 of 5:045 establishes the acceptable levels of these parameters for biochemically degradable wastewaters.

Chlorides, and Surfactants

The monitoring requirements for these parameters are consistent with requirements of 401 KAR 5:065, Section 2(8).

5. **ANTIDEGRADATION**

The conditions of 401 KAR 10:029, Section 1 have been satisfied by this permit action. Since this permit action involves reissuance of an existing permit, and does not propose an expanded discharge, a review under 401 KAR 10:030 Section 1 is not applicable.

6. **PROPOSED COMPLIANCE SCHEDULE FOR ATTAINING EFFLUENT LIMITATIONS**

The permittee will comply with all effluent limitations by the effective date of the permit.

7. **PROPOSED SPECIAL CONDITIONS WHICH WILL HAVE A SIGNIFICANT IMPACT ON THE DISCHARGE**

**Disposal of Non-Domestic Wastes**

The pass through or non-treatment by the wastewater treatment plant of chemicals or compounds which may injure, be chronically or acutely toxic to or produce adverse physiological or behavioral responses in humans, animals, fish and other aquatic life is not desirable. Materials such as acids, caustics, herbicides, household chemicals or cleansers, insecticides, lawn chemicals, non-biodegradable products, paints, pesticides, pharmaceuticals, and petroleum based products may not be treatable by the wastewater treatment plant and should not be introduced and other environmentally sound methods for disposal should be utilized. The permittee should educate users of its system that introduction of such chemicals or compounds could result in an adverse environmental impact and provide the users with alternative disposal measures. This requirement is consistent with the requirements of 401 KAR 5:065, Section 1(5) and 401 KAR 5:080, Section 1(c)(2)c.

**Certified Operators**

Pursuant to 401 KAR 5:010, Section 2(1) wastewater systems shall be operated under the supervision of a certified operator who holds a Kentucky Certificate equivalent to the class of system being supervised. All other operators employed by the system shall hold a Kentucky Certificate or shall be in the process of obtaining a Kentucky Certificate.

Pursuant to 401 KAR 5:010, Section 8 wastewater systems shall be classified as follows:

- Class I: Systems with a design capacity of less than or equal to 50,000 gpd
- Class II: Systems with a design capacity of more than 50,000 gpd but less than or equal to 2.0 MGD
- Class III: Systems with a design capacity of more than 2.0 MGD but less than or equal to 7.5 MGD
- Class IV: Systems with a design capacity of more than 7.5 MGD

Section 2(2) of 401 KAR 5:010 require the certified operator to be reasonably available if not physically present while the system is operating.

Section 2(3) of 401 KAR 5:010 require the Kentucky Certificate shall be displayed on the wall of wastewater system office.

**Outfall Signage**

As a member of ORSANCO (Ohio River Valley Sanitation Commission) the Commonwealth of Kentucky through the Division of Water implements a requirement that the permittee post a permanent marker at each discharge point to the Ohio River. It is the Best Professional Judgment of the Division of Water, 401 KAR 5:080, Section 1(2)(c)2, that all permittees post a marker at all discharge locations and/or monitoring points. The ORSANCO requirements for the marker specify it to be at least 2 feet by 2 feet in size and a minimum of 3 feet above ground level with the Permittee Name and KPDES permit and outfall numbers in 2 inch letters. For internal monitoring points the marker shall be of sufficient size to include the outfall number in 2 inch letters and is to be posted as near as possible to the actual sampling location.



8. **PERMIT DURATION**

Five (5) years. This facility is in the Salt/Licking Basin Management Unit as per the Kentucky Watershed Management Framework.

9. **PERMIT INFORMATION**

The application, draft permit, fact sheet, public notice, comments received, and additional information is available from the Division of Water at 200 Fair Oaks Lane, Frankfort, Kentucky 40601.

10. **REFERENCES AND CITED DOCUMENTS**

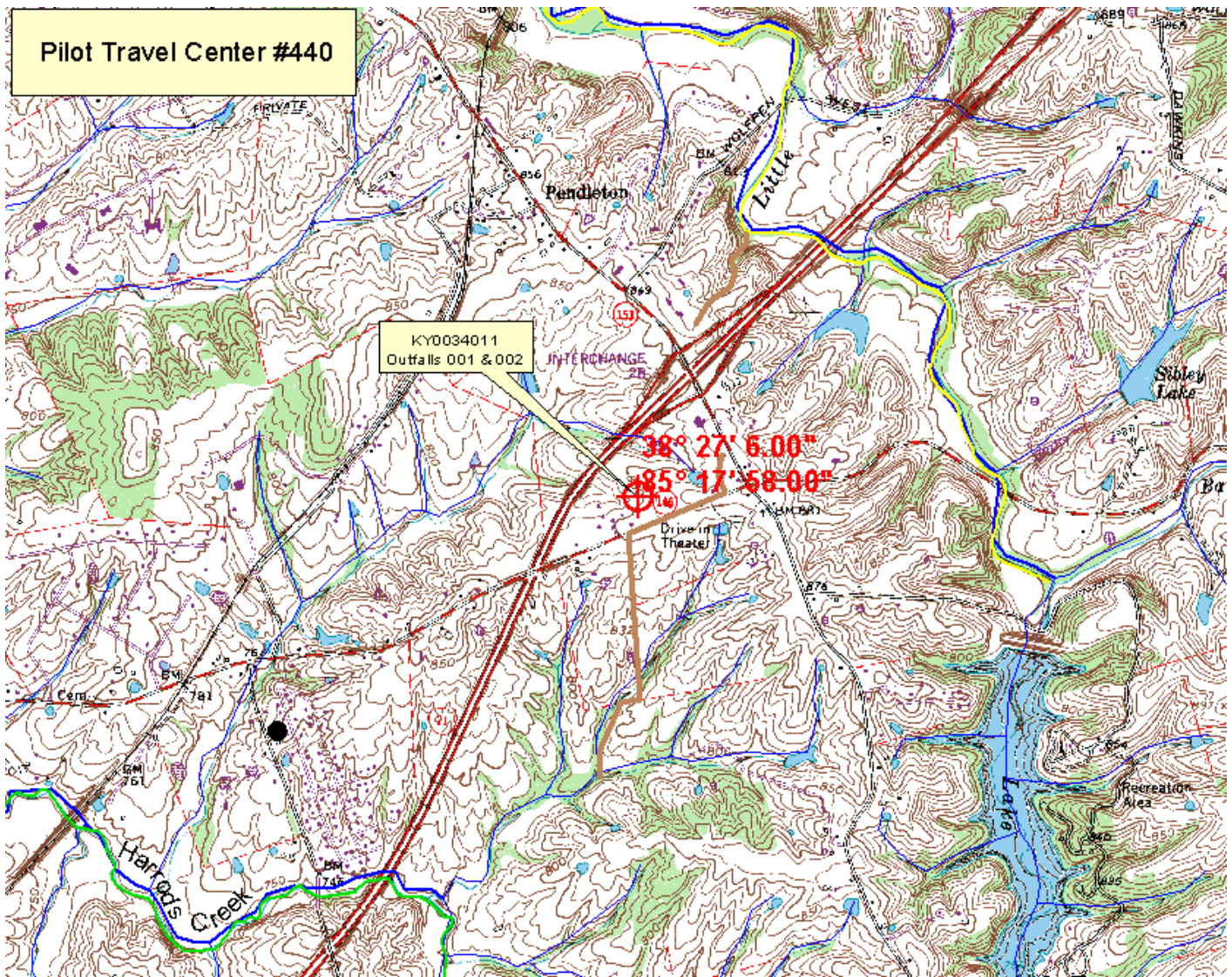
All material and documents referenced or cited in this fact sheet are a part of the permit information as described above and are readily available at the Division of Water Central Office. Information regarding these materials may be obtained from the person listed below.

11. **CONTACT**

For further information on the draft permit or comment process, contact the individual identified on the Public Notice or the Permit Writer - Diana Davidson at (502) 564-8158, extension 4901, or email [Diana.Davidson@ky.gov](mailto:Diana.Davidson@ky.gov).

12. **PUBLIC NOTICE INFORMATION**

Please refer to the attached Public Notice for details regarding the procedures for a final decision, deadline for comments and other information required by 401 KAR 5:075, Section 4(2)(e).



**STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) – REASONABLE POTENTIAL ANALYSIS – OUTFALL 001**

<b>Permit Writer</b>	Diana Davidson	
<b>Date Entered</b>	3/11/2009	
<b>Facility Name</b>	Pilot Travel Centers, LLC	
<b>KPDES Number</b>	KY0034011	
<b>Outfall Number</b>	002	
<b>Case</b>	Reissuance	
<b>Status:</b>		
Is this an existing facility – Enter “E”	E	
Is this an existing facility with an increase in pollutant load – Enter “I”		
Is this a new facility – Enter “N”		
Is this a regional facility with an approved up-to-date 201 plan – Enter “R”		
Has the permittee made a successful alternatives analysis/socioeconomic demonstration – Enter “A”		
<b>Receiving Water Name</b>	Unnamed tributary to Harrods Creek	
<b>Discharge Mile Point</b>	28.8	
<b>Public Water Supply Name</b>	Louisville Water Company	
<b>Intake Water Name</b>	Crescent Hill	
<b>Intake Mile Point</b>	954-380.8	
<b>Total Effluent Flow (Q<sub>T</sub>)</b>	0.0091	MGD
<b>Receiving Water 7Q10 (Q<sub>RW7Q10</sub>)</b>	0	cfs
<b>Receiving Water Harmonic Mean (Q<sub>RWHM</sub>)</b>	0	cfs
<b>Receiving Water pH</b>	7.4	SU
<b>Receiving Water Temperature</b>	20.00	°C
<b>Intake Water 7Q10 (Q<sub>IW7Q10</sub>)</b>	10600	cfs
<b>Intake Water Harmonic Mean (Q<sub>IWHM</sub>)</b>	45300	cfs
<b>Effluent Hardness</b>	100	(as mg/l CaCO <sub>3</sub> )
<b>Receiving Water Hardness</b>	137	(as mg/l CaCO <sub>3</sub> )
<b>Zone of Initial Dilution (ZID)</b>	1	
<b>Mixing Zone (MZ)</b>	0	
<b>Acute to Chronic Ratio (ACR)</b>	0	
<b>Impaired</b>	yes	
<b>Permittee agrees to accept no mixing zone for bioaccumulative or persistent pollutants prior to 09/08/2014</b>	yes	

## STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) – REASONABLE POTENTIAL ANALYSIS – OUTFALL 001

### Calculation Methodology

#### Definitions

Acute to Chronic Ratio	ACR	Total Effluent Flow	$Q_T$
Aquatic Life Acute Criteria	$C_A$	Receiving Water 7Q10	$Q_{RW7Q10}$
Aquatic Life Chronic Criteria	$C_C$	Receiving Water Harmonic Mean	$Q_{RWHM}$
Human Health Criteria - Fish Only	$C_{HHFO}$	Intake Water 7Q10	$Q_{IW7Q10}$
Human Health Criteria - Fish & Water	$C_{HHFW}$	Intake Water Harmonic Mean	$Q_{IWHM}$
End of Pipe Effluent Limit	$C_T$	Zone of Initial Dilution	ZID
Instream Background Concentration	$C_U$	Mixing Zone	MZ
Toxicity Units - Acute	$TU_a$	Toxicity Units - Chronic	$TU_c$
Effluent Hardness	$H_T$	Receiving Water Hardness	$H_{RW}$

#### Aquatic Life - Chemical Specific

##### Acute

NO ZID given  $C_T = C_A$

ZID given  $C_T = (C_A - C_U) \times (ZID)$

##### Chronic Mixing Zone / Complete Mix

$$C_T = \{C_C[Q_T + (MZ)(Q_{RW7Q10})] - [C_U(MZ)(Q_{RW7Q10})]\} / Q_T$$

#### Human Health - Chemical Specific

##### Fish Only: Mixing Zone / Complete Mix

Carcinogen / Non-Carcinogen  $C_T = \{C_{HHFO}[Q_T + (MZ)(Q_{RWHM})] - C_U(MZ)(Q_{RWHM})\} / Q_T$

##### Fish & Water Only: Mixing Zone / Applicable at point of withdrawal

Carcinogen  $C_T = \{C_{HHFW}[Q_T + (Q_{IWHM})] - C_U(Q_{IWHM})\} / Q_T$

Non-Carcinogen  $C_T = \{C_{HHFW}[Q_T + (Q_{IW7Q10})] - C_U(Q_{IW7Q10})\} / Q_T$

#### Aquatic Life - Whole Effluent Toxicity

##### Acute (Units $TU_a$ )

NO ZID given  $C_T = C_A$

ZID given  $C_T = (C_A - C_U) \times (ZID)$

##### Chronic Mixing Zone / Complete Mix (Units $TU_c$ )

$$C_T = \{C_C[Q_T + (MZ)(Q_{RW7Q10})] - [C_U(MZ)(Q_{RW7Q10})]\} / Q_T$$

Conversion of  $TU_c$  to  $TU_a$ :  $TU_c \times ACR = TU_a$

## STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) – REASONABLE POTENTIAL ANALYSIS – OUTFALL 001

### Metal Aquatic Criteria

#### Pollutant

Total Recoverable Cadmium  
 Chromium III  
 Total Recoverable Copper  
 Total Recoverable Lead  
 Total Recoverable Nickel  
 Total Recoverable Silver  
 Total Recoverable Zinc

#### Acute Criteria

$e^{(1.0166 (\ln \text{Hardness}) - 3.924)}$   
 $e^{(0.8190 (\ln \text{Hardness}) + 3.7256)}$   
 $e^{(0.9422 (\ln \text{Hardness}) - 1.700)}$   
 $e^{(1.273 (\ln \text{Hardness}) - 1.460)}$   
 $e^{(0.8460 (\ln \text{Hardness}) + 2.255)}$   
 $e^{(1.72 (\ln \text{Hardness}) - 6.59)}$   
 $e^{(0.8473 (\ln \text{Hardness}) + 0.884)}$

#### Chronic Criteria

$e^{(0.7409 (\ln \text{Hardness}) - 4.719)}$   
 $e^{(0.8190 (\ln \text{Hardness}) + 0.6848)}$   
 $e^{(0.8545 (\ln \text{Hardness}) - 1.702)}$   
 $e^{(1.273 (\ln \text{Hardness}) - 4.705)}$   
 $e^{(0.8460 (\ln \text{Hardness}) + 0.0584)}$   
 $e^{(0.8473 (\ln \text{Hardness}) + 0.884)}$

#### Hardness (as mg/l CaCO<sub>3</sub>)

Zone Initial Dilution (ZID)  
 Mixing Zone

$$H_{RW} + [H_T + H_{RW}]/ZID$$

$$[(Q_{RW7Q10})(MZ)(H_{RW}) + (Q_T)(H_T)]/[(Q_{RW7Q10})(MZ) + (Q_T)]$$

#### Total Ammonia Criteria

Chronic - applies state wide - unionized criteria of 0.05 mg/l

Acute - applies to the Ohio River (ORSANCO Criteria)

$$[0.05 * (1 + 10^{(pKa - pH)})] / 1.2 \quad pKa = (0.0902 + (2730 / (273.1 + T))) \quad T = \text{Temperature } ^\circ\text{C}$$

$$[0.411 / (1 + 10^{(7.204 - pH)})] + [58.4 / (1 + 10^{(pH - 7.204)})]$$

### Bioaccumulative or Persistent

For new facilities after September 8, 2004 mixing zones shall not be granted for bioaccumulative or persistent pollutants of concern.

Mixing zones for bioaccumulative or persistent pollutants of concerned assigned prior to September 8, 2004 shall expire no later than September 8, 2014, unless the permittee agrees to expiration of the mixing zone prior to that date.

Therefore, the application of the more stringent criteria of Human Health Fish & Water Consumption, Human Health Fish Only Consumption, and Aquatic Life Chronic shall apply as end-of-pipe effluent limitations.

### Antidegradation

If a new facility or an existing facility that will have a pollutant load increase, the effluent limits are halved unless the receiving stream is impaired or the permittee has demonstrated a negative socioeconomic or cost benefit analysis.

## **STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) – REASONABLE POTENTIAL ANALYSIS – OUTFALL 001**

### **Reasonable Potential Analysis**

In establishing water quality based effluent conditions the Division of Water must determine if the pollutant concentrations in the discharge will cause, have the reasonable potential to cause, or contribute to an excursion of any water standard. The process by which the Division of Water makes this determination is known as a Reasonable Potential Analysis.

A Reasonable Potential Analysis is performed by first calculating the expected effluent limitations for those pollutants with water quality criteria. The calculated limits are then compared to the concentrations reported on the KPDES permit application and/or a summarization of the values reported on the Discharge Monitoring Report (DMRs) submitted during the term of the permit. This comparison is made by dividing the reported value by the calculated effluent limitation and converting to a percentage. The following criteria are used in determining how the pollutant will be addressed in the permit.

### **New Permits or New Pollutants on Permit Renewals**

If the reported concentration is less than 70% of the calculated effluent limit then no monitoring or limitations will be required.

If the reported concentration is equal to or greater than 70% but less than 90% of the calculated effluent limit then monitoring will be required.

If the reported concentration is equal to or greater than 90% and the number of analysis reported on the KPDES permit application is less than 12 then monitoring will be required.

If the reported concentration is equal to or greater than 90% and the number of analysis reported on the KPDES permit application is equal or greater than 12 then an effluent limitation will be required.

### **Permit Renewals - Existing Pollutants**

If the reported concentration is less than 70% of the calculated effluent limit then and the source of the reported concentration was the DMRs for that facility and there were more than 12 DMRs utilized to determine the reported concentrations then the pollutant will be removed from the permit.

If the reported concentration is equal to or greater than 70% but less than 90% of the calculated effluent limit then monitoring will be required.

If the reported concentration is equal to or greater than 90% then an effluent limitation will be required.

In all cases, the Division of Water still may exercise its Best Professional Judgment in the implementation of the results.

# STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) – REASONABLE POTENTIAL ANALYSIS – OUTFALL 001

Parameter	CAS Number	Reported Discharge (mg/l)		Calculated Effluent Limitations (mg/l)		Reasonable Potential		Data Source	No. of Samples	Effluent Requirement		Justification	
		Average	Maximum	Average	Maximum	Average	Maximum			Average	Maximum	Average	Maximum
Chloride	16887006	77.350000	353.000000	#DIV/0!	1,200.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	Acute
Total Residual Chlorine		0.000000	0.000000	#DIV/0!	0.019000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	Acute
Color		0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Fluoride		0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Nitrate-Nitrite (as N)	14797558	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Total Alpha		0.000000	0.000000	#DIV/0!	15.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	Acute
Total Beta		0.000000	0.000000	#DIV/0!	50.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	Acute
Total Radium		0.000000	0.000000	#DIV/0!	5.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	Acute
Sulfate (as SO4)		0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Surfactants		0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Total Recoverable Barium	7440393	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Total Recoverable Iron	7439896	0.000000	0.000000	#DIV/0!	4.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	Acute
Total Recoverable Antimony	7440360	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Total Recoverable Arsenic	7440382	0.000000	0.000000	#DIV/0!	0.340000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	Acute
Total Recoverable Beryllium	7440417	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Total Recoverable Cadmium	7440439	0.000000	0.000000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	No Data	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Total Recoverable Chromium	7440439	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Total Recoverable Copper	7440508	0.000000	0.000000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	No Data	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Total Recoverable Lead	7439921	0.016500	0.040000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	No Data	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Total Recoverable Mercury	7439976	0.000000	0.000000	#DIV/0!	0.001700	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	Acute
Total Recoverable Nickel	7440020	0.000000	0.000000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	No Data	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Total Recoverable Selenium	7782492	0.000000	0.000000	#DIV/0!	0.020000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	Acute
Total Recoverable Silver	7440224	0.000000	0.000000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	No Data	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Total Recoverable Thallium	7440280	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Total Recoverable Zinc	7440666	0.078000	0.560000	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	No Data	0	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Free Cyanide	57125	0.000000	0.000000	#DIV/0!	0.022000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	Acute
2,3,7,8 Tetrachlorodibenzo P Dioxin	1746016	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Acrolein	107028	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Acrylonitrile	107131	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Benzene	71432	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Bromoform	75252	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Carbon Tetrachloride	56235	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Chlorobenzene	108907	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Chlorodibromomethane	124481	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Chloroform	67663	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Dichlorobromomethane	75274	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
1,2-Dichloroethane	107062	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
1,1-Dichloroethylene	75354	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
1,2-Dichloropropane	78875	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
1,3-Dichloropropene	542756	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Ethylbenzene	100414	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Methyl Bromide	74839	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Methylene Chloride	75092	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA

# STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) – REASONABLE POTENTIAL ANALYSIS – OUTFALL 001

Parameter	CAS Number	Reported Discharge (mg/l)		Calculated Effluent Limitations (mg/l)		Reasonable Potential		Data Source	No. of Samples	Effluent Requirement		Justification	
		Average	Maximum	Average	Maximum	Average	Maximum			Average	Maximum	Average	Maximum
1,1,2,2-Tetrachloroethane	79345	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Tetrachloroethylene	127184	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Toluene	108883	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
1,2-Trans-Dichloroethylene	156605	0.000000	0.000000	#DIV/0!	0.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
1,1,1-Trichloroethane	71556	0.000000	0.000000	600.000000	1,200.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
1,1,2-Trichloroethane	79005	0.000000	0.000000	0.011000	0.019000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Trichloroethylene	79016	0.000000	0.000000	56,436.338736	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Vinyl Chloride	75014	0.000000	0.000000	1,504,969.032967	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
2-Chlorophenol	95578	0.000000	0.000000	7,524,845.164835	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
2,4-Dichlorophenol	120832	0.000000	0.000000	NA	15.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
2,4-Dimethylphenol	105679	0.000000	0.000000	NA	50.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
2,4-Dinitrophenol	51285	0.000000	0.000000	NA	5.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Pentachlorophenol	87865	0.000000	0.000000	188,121,129.120879	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Phenol	108952	0.000000	0.000000	376,242.258242	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
2,4,6-Trichlorophenol	88062	0.000000	0.000000	752,484.516484	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Acenaphthene	83329	0.000000	0.000000	1.000000	4.000000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Anthracene	120127	0.000000	0.000000	0.640000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Benzidine	92875	0.000000	0.000000	0.150000	0.340000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Benzo(a)anthracene	56553	0.000000	0.000000	3,009.938066	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Benzo(a)pyrene	50328	0.000000	0.000000	0.000271	0.002133	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Benzo(k)fluoranthene	205992	0.000000	0.000000	75,248.451648	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Bis(2-chloroisopropyl)ether	108601	0.000000	0.000000	0.009329	0.013999	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Bis(2-ethylhexyl)phthalate	117817	0.000000	0.000000	0.003182	0.081645	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Butylbenzyl phthalate	85687	0.000000	0.000000	0.000051	0.001700	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
2-Chloronaphthalene	91587	0.000000	0.000000	0.052163	0.469174	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Chrysene	218019	0.000000	0.000000	0.005000	0.020000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Dibenzo(a,h)anthracene	53703	0.000000	0.000000	NA	0.003784	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
1,2-Dichlorobenzene	95501	0.000000	0.000000	0.006300	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
1,3-Dichlorobenzene	541731	0.000000	0.000000	0.119816	0.119816	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
1,4-Dichlorobenzene	106467	0.000000	0.000000	0.005200	0.022000	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
3,3-Dichlorobenzidine	91941	0.000000	0.000000	0.000000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Diethyl phthalate	84662	0.000000	0.000000	0.290000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Dimethyl phthalate	131113	0.000000	0.000000	0.000250	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Di-n-butyl phthalate	84742	0.000000	0.000000	0.051000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
2,4-Dinitrotoluene	121142	0.000000	0.000000	0.140000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
1,2-Diphenylhydrazine	122667	0.000000	0.000000	0.001600	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Fluoranthene	206440	0.000000	0.000000	21.000000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Fluorene	86737	0.000000	0.000000	0.013000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Hexachlorobenzene	118741	0.000000	0.000000	0.470000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Hexachlorobutadiene	87683	0.000000	0.000000	0.017000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Hexachlorocyclopentadiene	77474	0.000000	0.000000	0.037000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Hexachloroethane	67721	0.000000	0.000000	0.003200	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Ideno(1,2,3-cd)pyrene	193395	0.000000	0.000000	0.015000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA



# STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) – REASONABLE POTENTIAL ANALYSIS – OUTFALL 001

Parameter	CAS Number	Reported Discharge (mg/l)		Calculated Effluent Limitations (mg/l)		Reasonable Potential		Data Source	No. of Samples	Effluent Requirement		Justification	
		Average	Maximum	Average	Maximum	Average	Maximum			Average	Maximum	Average	Maximum
Isophorone	78591	0.000000	0.000000	1.700000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Nitrobenzene	98953	0.000000	0.000000	29.000000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
N-Nitrosodimethylamine	62759	0.000000	0.000000	1.500000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
N-Nitrosodi-n-Propylamine	621647	0.000000	0.000000	0.590000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
N-Nitrosodiphenylamine	86306	0.000000	0.000000	0.004000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Pyrene	129000	0.000000	0.000000	0.003300	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
1,2,4-Trichlorobenzene	120821	0.000000	0.000000	200.000000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	NA
Aldrin	309002	0.000000	0.000000	140.000000	NA	#DIV/0!	0.00%	No Data	0	#DIV/0!	None	#DIV/0!	Acute
alpha-BHC	319846	0.000000	0.000000	150,496.903297	NA	12.89%	29.42%	DMR	32	Remove	Remove	Chronic	Acute
Beta-BHC	319857	0.000000	0.000000	0.016000	NA	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
gamma-BHC (Lindane)	58899	0.000000	0.000000	0.030000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Chlordane	57749	0.000000	0.000000	0.530000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
4,4'-DDT	50293	0.000000	0.000000	0.150000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
4,4'-DDE	72559	0.000000	0.000000	0.290000	NA	0.00%	0.00%	No Data	0	None	None	NA	Acute
4,4'-DDD	72548	0.000000	0.000000	0.850000	NA	0.00%	0.00%	No Data	0	None	None	NA	Acute
Dieldrin	60571	0.000000	0.000000	5.300000	NA	0.00%	0.00%	No Data	0	None	None	NA	Acute
Alpha-Endosulfan	959988	0.000000	0.000000	0.003000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Beta-Endosulfan	33213659	0.000000	0.000000	1,700.000000	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Endosulfan sulfate	1031078	0.000000	0.000000	0.002400	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Endrin	72208	0.000000	0.000000	0.990000	NA	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Endrin aldehyde	7421934	0.000000	0.000000	40.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Heptachlor	76448	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Heptachlor epoxide	1024573	0.000000	0.000000	0.000018	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Polychlorinated Biphenyls (PCBs)		0.000000	0.000000	0.000018	NA	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Toxaphene	8001352	0.000000	0.000000	0.000018	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
1,2,4,5-Tetrachlorobenzene	95943	0.000000	0.000000	65.000000	NA	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
2-methyl-4,6-dinitrophenol	534521	0.000000	0.000000	0.002200	NA	518.61%	48.99%	DMR	32	Limit	Remove	Chronic	Acute
2,4-D	94757	0.000000	0.000000	1.900000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	Acute
2,4,5-TP (Silvex)	93721	0.000000	0.000000	1.600000	NA	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
2,4,5-trichlorophenol	95954	0.000000	0.000000	0.000018	NA	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Asbestos	1332214	0.000000	0.000000	0.000018	NA	0.00%	0.00%	No Data	0	None	None	NA	Acute
Benzo(b)fluoranthene	205992	0.000000	0.000000	17.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Bis(2-chloroethyl)ether	111444	0.000000	0.000000	0.960000	NA	65.10%	467.38%	DMR	32	Remove	Limit	Chronic	Acute
Bis(chloromethyl)ether	542881	0.000000	0.000000	2.600000	NA	0.00%	0.00%	No Data	0	None	None	Chronic	Acute
Chloropyrifos	2921882	0.000000	0.000000	0.000028	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Chromium (III)	16065831	0.000000	0.000000	44.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Chromium (VI)	18540299	0.000000	0.000000	1,100.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Demeton	8065483	0.000000	0.000000	4.500000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Dinitrophenols	25550587	0.000000	0.000000	0.003400	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Guthion	86500	0.000000	0.000000	0.000200	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Hexachlorocyclo-hexane-Technical	319868	0.000000	0.000000	0.140000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Hydrogen Sulfide, Undissociated	7783064	0.000000	0.000000	5.300000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Malathion	121755	0.000000	0.000000	0.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA

**STEADY STATE TOXICS WASTELOAD ALLOCATION MODEL (SSTWAM2004) – REASONABLE POTENTIAL ANALYSIS – OUTFALL 001**

Parameter	CAS Number	Reported Discharge (mg/l)		Calculated Effluent Limitations (mg/l)		Reasonable Potential		Data Source	No. of Samples	Effluent Requirement		Justification	
		Average	Maximum	Average	Maximum	Average	Maximum			Average	Maximum	Average	Maximum
Methoxychlor	72435	0.000000	0.000000	0.018000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Mirex	2385855	0.000000	0.000000	17.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Nitrosamines, Other		0.000000	0.000000	0.003300	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
N-Nitrosodibutylamine	924163	0.000000	0.000000	0.000018	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
N-Nitrosodiethylamine	55185	0.000000	0.000000	0.960000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
N-Nitrosopyrrolidine	930552	0.000000	0.000000	0.690000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Parathion	56382	0.000000	0.000000	0.003000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Pentachlorobenzene	608935	0.000000	0.000000	0.000510	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Phthalate esters		0.000000	0.000000	0.006000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Total Dissolved Solids		0.000000	0.000000	4.000000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Tritium		0.000000	0.000000	0.940000	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Total Strontium-90		0.000000	0.000000	0.000000	0.003000	0.00%	0.00%	No Data	0	None	None	HH Fish	NA
Uranium		0.000000	0.000000	0.000005	NA	0.00%	0.00%	No Data	0	None	None	HH DWS	NA
Total Ammonia		0.000000	0.000000	0.000017	NA	0.00%	0.00%	No Data	0	None	None	HH Fish	NA

Hardness  
 Metal limitations are developed using the mixed hardness of the effluent and receiving waters

Chronic  
 100.00  
 Acute  
 100.00

**Toxicity**

<b><u>Type of Test</u></b>	<b><u>Maximum</u></b>	<b><u>Units</u></b>	<b><u>Justification</u></b>	<b><u>Percent Effluent</u></b>
Chronic	1.00	TUc	Chronic	100.00%

# KPDES



## KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

# PERMIT

PERMIT NO.: KY0034011  
AI NO.: 1855

### AUTHORIZATION TO DISCHARGE UNDER THE KENTUCKY POLLUTANT DISCHARGE ELIMINATION SYSTEM

Pursuant to Authority in KRS 224,

Pilot Travel Centers, LLC  
5508 Lonas Road  
Knoxville, Kentucky 37909

is authorized to discharge from a facility located at

Pilot Travel Center #440  
205 Pendleton Road  
Pendleton, Henry County, Kentucky

to receiving waters of an

unnamed tributary to Harrods Creek at 38°27'06" North Latitude and  
85°17' 58" West Longitude.

in accordance with effluent limitations, monitoring requirements and other conditions  
set forth in Parts I, II, III, and IV hereof. The permit consists of this cover  
sheet, and Part I 2 pages, Part II 1 pages, and Part III 1 page.

This permit shall become effective on.

This permit and the authorization to discharge shall expire at midnight,

\_\_\_\_\_  
Date Signed

\_\_\_\_\_  
Sandra L. Gruzesky, Director  
Division of Water

A1. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: 001 - Sanitary Wastewater (Design Flow = 0.0014 MGD)

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	(lbs/day)		Other Units (Specify)			
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow (MGD)	Report	Report	N/A	N/A	1/Quarter	Instantaneous
BOD <sub>5</sub> (mg/l)	0.35	0.53	30	45	1/Quarter	24 Hr Composite
TSS (mg/l)	0.35	0.53	30	45	1/Quarter	24 Hr Composite
Ammonia Nitrogen (as mg/l N)						
May 1 - October 31	0.05	0.07	4.0	6.0	1/Quarter	24 Hr Composite
November 1 - April 30	0.07	0.11	6.0	9.0	1/Quarter	24 Hr Composite
<i>Escherichia Coli</i> (N/100 ml)	N/A	N/A	130	240	1/Quarter	Grab
Dissolved Oxygen (mg/l) (minimum)	N/A	N/A	Not less than	7.0	1/Quarter	Grab
pH (standard units)	N/A	N/A	6.0 (min)	9.0 (max)	1/Quarter	Grab
Total Residual Chlorine (mg/l)	N/A	N/A	0.011	0.019	1/Quarter	Grab

The abbreviation BOD<sub>5</sub> means Biochemical Oxygen Demand (5-day).

The abbreviation TSS means Total Suspended Solids.

The abbreviation N/A means Not Applicable.

The effluent limitations for BOD<sub>5</sub> and TSS are Monthly (30 day) and Weekly (7 day) Averages.

The effluent limitations for *Escherichia Coli* are thirty (30) day and seven (7) day Geometric Means.

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location:  
nearest accessible point prior to discharge to or mixing with the receiving waters or wastestreams from other outfalls.

## A2. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

During the period beginning on the effective date of this permit and lasting through the term of this permit, the permittee is authorized to discharge from Outfall serial number: 002 - Truck Rinsing at Fueling Areas and Storm Water Runoff

Such discharges shall be limited and monitored by the permittee as specified below:

<u>EFFLUENT CHARACTERISTICS</u>	<u>DISCHARGE LIMITATIONS</u>				<u>MONITORING REQUIREMENTS</u>	
	(lbs/day)	Other Units (Specify)				
	Monthly Avg.	Daily Max.	Monthly Avg.	Daily Max.	Measurement Frequency	Sample Type
Flow (MGD)	Report	Report	N/A	N/A	1/Quarter	Instantaneous
BOD <sub>5</sub> (mg/l)	N/A	N/A	30	45	1/Quarter	24 Hr Composite
TSS (mg/l)	N/A	N/A	30	45	1/Quarter	24 Hr Composite
pH (standard units)	N/A	N/A	6.0 (min)	9.0 (max)	1/Quarter	Grab
Oil & Grease (mg/l)	N/A	N/A	10	15	1/Quarter	Grab
Lead (µg/l)	N/A	N/A	0.0032	Report	1/Quarter	Grab
Zinc (µg/l)	N/A	N/A	Report	0.1198	1/Quarter	Grab
Surfactants (MBAS)	N/A	N/A	Report	Report	1/Quarter	Grab

The abbreviation BOD<sub>5</sub> means Biochemical Oxygen Demand (5-day).

The abbreviation TSS means Total Suspended Solids.

The abbreviation N/A means Not Applicable.

The effluent limitations for BOD<sub>5</sub> and TSS are Monthly (30 day) and Weekly (7 day) Averages.

There shall be no discharge of floating solids or visible foam or sheen in other than trace amounts.

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location: nearest accessible point prior to discharge to or mixing with the receiving waters or wastestreams from other outfalls.

B. SCHEDULE OF COMPLIANCE

The permittee shall achieve compliance with all requirements on the effective date of this permit.

DRAFT

## **PART II**

### **STANDARD CONDITIONS FOR KPDES PERMIT**

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

It is the responsibility of the permittee to demonstrate compliance with permit parameter limitations by utilization of sufficiently sensitive analytical methods.

The permittee is also advised that all KPDES permit conditions in KPDES Regulation 401 KAR 5:065, Section 1 will apply to all discharges authorized by this permit

**PART III**

OTHER REQUIREMENTS

A. Reporting of Monitoring Results

Monitoring results obtained during each monitoring period must be reported on a preprinted Discharge Monitoring Report (DMR) Form that will be mailed to you. The completed DMR for each monitoring period must be sent to the Division of Water at the address listed below (with a copy to the appropriate Regional Office) postmarked no later than the 28th day of the month following the monitoring period for which monitoring results were obtained.

Division of Water  
Florence Regional Office  
8020 Veterans Memorial Drive  
Suite 110  
Florence, Kentucky 41042  
ATTN: Supervisor

Division of Water  
Surface Water Permits Branch  
Permit Support Section  
200 Fair Oaks Lane  
Frankfort, Kentucky 40601

B. Reopener Clause

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under 401 KAR 5:050 through 5:086, if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in the permit; or
2. Controls any pollutant not limited in the permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

C. Disposal of Non-Domestic Wastes

The pass through or non-treatment by the wastewater treatment plant of chemicals or compounds which may injure, be chronically or acutely toxic to or produce adverse physiological or behavioral responses in humans, animals, fish and other aquatic life is not desirable. Materials such as acids, caustics, herbicides, household chemicals or cleansers, insecticides, lawn chemicals, non-biodegradable products, paints, pesticides, pharmaceuticals, and petroleum based products may not be treatable by the wastewater treatment plant and should not be introduced and other environmentally sound methods for disposal should be utilized. The permittee should educate users of its system that introduction of such chemicals or compounds could result in an adverse environmental impact and provide the users with alternative disposal measures.

D. Certified Operators

This wastewater system shall be operated under the supervision of a Class I Kentucky Certified Operator who shall be reasonably available at all times. All other operators employed by the system shall hold a Kentucky Certificate or shall be in the process of obtaining a Kentucky Certificate. The certificates of each operator shall be prominently displayed on the wall of the system office.

E. Outfall Signage

The permittee shall post a permanent marker at all discharge locations and/or monitoring points. The marker shall be at least 2 feet by 2 feet in size and a minimum of 3 feet above ground level with the Permittee Name and KPDES permit and outfall numbers in 2 inch letters. For internal monitoring points the marker shall be of sufficient size to include the outfall number in 2 inch letters and shall be posted as near as possible to the actual sampling location.